UNITED STATES PATENT AND TRADEMARK OFFICE

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10/728,676	12/04/2003	Anil K. Kumar	P17115	9059

59796 7590 08/22/2007 INTEL CORPORATION c/o INTELLEVATE, LLC P.O. BOX 52050 MINNEAPOLIS, MN 55402	**EXAMINER** SCIACCA, SCOTT M

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/728,676	KUMAR, ANIL K.
	Examiner	**Art Unit**	
	Scott M. Sciacca	2109	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>04 December 2003</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-30</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-30</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a) ☐ All   b) ☐ Some *   c) ☐ None of:

   1. ☐ Certified copies of the priority documents have been received.

   2. ☐ Certified copies of the priority documents have been received in Application No. _____.

   3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date <u>11/12/2006</u>.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Specification

1.   The title of the invention is not descriptive. A new title is required that is clearly

indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

3.   Claims 1-5 and 8-30 are rejected under 35 U.S.C. 102(e) as being anticipated by

Wentink (US 7,136,392).

Regarding Claim 1, Wentink teaches a method comprising:

in response, at least in part, to a request for a service from a system,

> determining a quality of service to assign to an application to be executed
>
> by the system to provide the service, the quality of service based, at least
>
> in part, on one or more service characteristics of the application (*"For*
>
> *example, in a network that supports multimedia services like video-on-*
>
> *demand, video conferencing, online brokerage, and electronic commerce,*
>
> *a QoS mechanism can prioritize time-sensitive multimedia data streams*

so that their packets are transmitted--over a communication medium or

channel shared by two or more terminals or stations--with less delay

and/or at a higher rate than packets of data streams less affected or

unaffected by delay" – See Col. 1, lines 20-28); and

allocating one or more resources to the application, the one or more resources

being based, at least in part, on the quality of service (*"Quality of service*

(QoS) mechanisms allocate transmission resources to different types or classes

of data traffic so that certain traffic classes can be preferentially served over

other classes" – See Col. 1, lines 16-20).

Regarding Claim 2, Wentink teaches the method of Claim 1, wherein the system

comprises a modified intelligent media center (MIMC) (See Fig. 2 which shows a media

station), and said determining a quality of service to assign to an application to be

executed by the system to provide the service comprises determining a quality of

service to assign to a multimedia application to be executed by the MIMC to provide the

service (*"For example, in a network that supports multimedia services like video-on-*

demand, video conferencing, online brokerage, and electronic commerce, a QoS

mechanism can prioritize time-sensitive multimedia data streams so that their packets

are transmitted--over a communication medium or channel shared by two or more

terminals or stations--with less delay and/or at a higher rate than packets of data

streams less affected or unaffected by delay" – See Col. 1, lines 20-28).

Regarding Claim 3, Wentink teaches the method of Claim 2, wherein said determining the quality of service to assign to the multimedia application comprises assigning one or more QoS (quality of service) parameters to the application (*"However, in accordance with an illustrative embodiment of the present invention, the release, for transmission, of data messages having the same level of priority is governed by a set of parameters that is common for all stations of the network"* – See Col. 2, lines 12-16), the QoS parameters being based on a class of service associated with the one or more service characteristics of the multimedia application (*"That is, an internal queue in any one of the stations is configured to delay and/or release data messages of a given priority level according to a set of rules that applies identically to the internal queue of any other station that handles data messages of that same priority level"* – See Col. 2, lines 16-21).

Regarding Claim 4, Wentink teaches the method of Claim 3, wherein the multimedia application is a wireless application (*"Initially, it should be noted that it may be desirable to increase the probability of successful transfer of (MSDUs) across a shared channel such, for example, as the wireless medium employed by the illustrative embodiment of the present invention"* – See Col. 3, lines 51-55), and the one or more QoS parameters comprise at least one of:

AIFS (arbitration inter-frame space) (*"the highest priority traffic class is directed to a queue that waits for a minimum interframe space interval $QIFS_0$"* – See Col. 7, lines 19-21);

CW$_{min}$ (minimum contention window) (*"The scheduling function of the illustrative embodiment further specifies a contention window CWmin from which a random back off is computed for each queue"* – See Col. 6, lines 56-59);

CW$_{max}$ (maximum contention window) (*"It should be noted that although a single value of CWmax common to all stations is suggested in FIG. 5, it is also possible to provide differentiated CWmax[i] values for the respective queues"* – See Col. 8, lines 10-13); and

PF (persistence factor) (*"the persistence factor, PF, is computed using the following procedure"* – See Col. 9, lines 6-7).

Regarding Claim 5, Wentink teaches the method of Claim 3, wherein said determining the quality of service to assign to the multimedia application additionally comprises determining a size of packets to be used for transmitting data associated with the multimedia application from the system to a client (*"Each contention window value is 1 octet in length and contains an unsigned integer"* – See Col. 8, lines 47-48).

Regarding Claim 8, Wentink teaches the method of Claim 1 wherein said allocating the one or more resources to the application based, at least in part, on the quality of service comprises assigning at least one of:

a processing throughput (*"Each wireless station further includes a general-purpose processing unit (CPU) 20a-20e"* – See Col. 4, lines 49-51; *"Application*

programs stored within the memory at each wireless station are executed by its CPU" –
See Col. 4, lines 51-53);

a queue length (*"Transmission opportunities are thus fairly allocated between all
queues containing data messages of the same priority level"* – See Abstract); and

memory buffer size (*"Using the information received via VxD 26c, data message
units from a given session are mapped to one of these n traffic classifications and
placed in a corresponding one of queues 50_0 through 50_n within data buffers 34"* – See
Col. 6, lines 11-14).

Regarding Claim 9, Wentink teaches the method of Claim 1, additionally
comprising:

queuing the application for servicing (*"A method according to an illustrative
embodiment of the invention comprises directing, to a first output queue at a first station
of a communication network, data message units that are to be transmitted over a
communication medium and that have a first traffic classification"* – See Col. 2, lines 24-
28); and

scheduling the application for servicing (*"Once placed within one of the queues,
the data message units are released in accordance with a coordination function (CF)
implemented in a scheduler 52 which prioritizes the transmission of data message units
from each queue in accordance with a defined access control algorithm"* – See Col. 6,
lines 14-19).

Regarding Claim 10, Wentink teaches an apparatus comprising:

circuitry capable of:

in response, at least in part, to a request for a service from a system, determining

a quality of service to assign to an application to be executed by the

system to provide the service, the quality of service based, at least in part,

on one or more service characteristics of the application ("*For example, in*

a network that supports multimedia services like video-on-demand, video

conferencing, online brokerage, and electronic commerce, a QoS

mechanism can prioritize time-sensitive multimedia data streams so that

their packets are transmitted--over a communication medium or channel

shared by two or more terminals or stations--with less delay and/or at a

higher rate than packets of data streams less affected or unaffected by

delay" – See Col. 1, lines 20-28); and

allocating one or more resources to the application, the one or more resources

based, at least in part, on the quality of service ("*Quality of service (QoS)*

mechanisms allocate transmission resources to different types or classes of data

traffic so that certain traffic classes can be preferentially served over other

classes" – See Col. 1, lines 16-20).

Regarding Claim 11, Wentink teaches the apparatus of Claim 10, wherein the

system comprises a modified intelligent media center (MIMC) (See Fig. 2 which shows

a media station), and the circuitry that is capable of determining a quality of service to

assign to an application to be executed by the system to provide the service is capable

of determining a quality of service to assign to a multimedia application to be executed

by the MIMC to provide the service *("For example, in a network that supports*

multimedia services like video-on-demand, video conferencing, online brokerage, and

electronic commerce, a QoS mechanism can prioritize time-sensitive multimedia data

streams so that their packets are transmitted--over a communication medium or channel

shared by two or more terminals or stations--with less delay and/or at a higher rate than

packets of data streams less affected or unaffected by delay" – See Col. 1, lines 20-28).

Regarding Claim 12, Wentink teaches the apparatus of Claim 11, wherein said

circuitry capable of determining the quality of service to assign to the multimedia

application is also capable of assigning one or more QoS (quality of service) parameters

to the multimedia application *("However, in accordance with an illustrative embodiment*

of the present invention, the release, for transmission, of data messages having the

same level of priority is governed by a set of parameters that is common for all stations

of the network" – See Col. 2, lines 12-16).

Regarding Claim 13, Wentink teaches the apparatus of Claim 12, wherein the

multimedia application is a wireless application *("Initially, it should be noted that it may*

be desirable to increase the probability of successful transfer of (MSDUs) across a

shared channel such, for example, as the wireless medium employed by the illustrative

embodiment of the present invention" – See Col. 3, lines 51-55), and the one or more

QoS parameters comprise at least one of:

AIFS (arbitration inter-frame space) ("the highest priority traffic class is directed

to a queue that waits for a minimum interframe space interval $QIFS_0$" – See Col. 7, lines

19-21);

CW_{min} (minimum contention window) ("The scheduling function of the illustrative

embodiment further specifies a contention window CWmin from which a random back

off is computed for each queue" – See Col. 6, lines 56-59);

CW_{max} (maximum contention window) ("It should be noted that although a single

value of CWmax common to all stations is suggested in FIG. 5, it is also possible to

provide differentiated CWmax[i] values for the respective queues" – See Col. 8, lines

10-13); and

PF (persistence factor) ("the persistence factor, PF, is computed using the

following procedure" – See Col. 9, lines 6-7).

Regarding Claim 14, Wentink teaches the apparatus of Claim 12, wherein said

circuitry capable of determining the quality of service to assign to the multimedia

application is also capable of determining a size of packets to be used for transmitting

data associated with the multimedia application from the system to a client ("Each

contention window value is 1 octet in length and contains an unsigned integer" – See

Col. 8, lines 47-48).

Regarding Claim 15, Wentink teaches the apparatus of Claim 10, wherein said circuitry capable of allocating the one or more resources to the application based, at least in part, on the quality of service is also capable of assigning at least one of:

a processing throughput (*"Each wireless station further includes a general-purpose processing unit (CPU) 20a-20e"* – See Col. 4, lines 49-51; *"Application programs stored within the memory at each wireless station are executed by its CPU"* – See Col. 4, lines 51-53);

a queue length (*"Transmission opportunities are thus fairly allocated between all queues containing data messages of the same priority level"* – See Abstract); and

memory buffer size (*"Using the information received via VxD 26c, data message units from a given session are mapped to one of these n traffic classifications and placed in a corresponding one of queues 50_0 through 50_n within data buffers 34"* – See Col. 6, lines 11-14).

Regarding Claim 16, Wentink teaches the apparatus of Claim 10, additionally said circuitry additionally capable of:

queuing the application for servicing (*"A method according to an illustrative embodiment of the invention comprises directing, to a first output queue at a first station of a communication network, data message units that are to be transmitted over a communication medium and that have a first traffic classification"* – See Col. 2, lines 24-28); and

scheduling the application for servicing (*"Once placed within one of the queues,*

the data message units are released in accordance with a coordination function (CF)

implemented in a scheduler 52 which prioritizes the transmission of data message units

from each queue in accordance with a defined access control algorithm" – See Col. 6,

lines 14-19).

Regarding Claim 17, Wentink teaches a system comprising:

one or more applications to be executed to provide one or more services to one

 or more clients (*"Application programs stored within the memory at each*

 wireless station are executed by its CPU and communicate over the

 WLAN through its NIC" – See Col. 4, lines 51-54);

one or more resources to support the execution of the one or more applications

 (*"Each wireless station further includes a general-purpose processing unit*

 (CPU) 20a-20e and a memory 22a-22e" – See Col. 4, lines 49-51);

a wireless network interface card to receive from the one or more clients, one or

 more requests for a service (*"In any event, and with continued reference*

 to the illustrative communication network of FIG. 1, it will be seen that

 each of wireless stations 12a 12e includes a respective network interface

 controller (NIC) 16a 16e that is coupled to a corresponding antenna 18a

 18e" – See Col. 4, lines 45-49); and

circuitry communicatively coupled to the wireless network interface card, and

 capable of:

in response, at least in part,-to a request for a service, determining a

quality of service to assign to one of the applications to provide one

of the one or more services, the quality of service based, at least in

part, on one or more service characteristics of the application (*"For*

example, in a network that supports multimedia services like video-

on-demand, video conferencing, online brokerage, and electronic

commerce, a QoS mechanism can prioritize time-sensitive

multimedia data streams so that their packets are transmitted--over

a communication medium or channel shared by two or more

terminals or stations--with less delay and/or at a higher rate than

packets of data streams less affected or unaffected by delay" – See

Col. 1, lines 20-28); and

allocating at least one of the one or more resources to the application, the

at least one of the one or more resources based, at least in part, on

the quality of service (*"Quality of service (QoS) mechanisms*

allocate transmission resources to different types or classes of data

traffic so that certain traffic classes can be preferentially served

over other classes" – See Col. 1, lines 16-20).

Regarding Claim 18, Wentink teaches the system of Claim 17, wherein the

system comprises a modified intelligent media center (MIMC) (See Fig. 2 which shows

a media station), and the circuitry that is capable of determining a quality of service to

assign to an application to be executed by the system to provide the service is capable

of determining a quality of service to assign to a multimedia application to be executed

by the MIMC to provide the service ("For example, in a network that supports

multimedia services like video-on-demand, video conferencing, online brokerage, and

electronic commerce, a QoS mechanism can prioritize time-sensitive multimedia data

streams so that their packets are transmitted--over a communication medium or channel

shared by two or more terminals or stations--with less delay and/or at a higher rate than

packets of data streams less affected or unaffected by delay" – See Col. 1, lines 20-28).

Regarding Claim 19, Wentink teaches the system of Claim 18, wherein said

circuitry capable of determining the quality of service to assign to the multimedia

application is also capable of assigning one or more QoS (quality of service) parameters

to the multimedia application ("However, in accordance with an illustrative embodiment

of the present invention, the release, for transmission, of data messages having the

same level of priority is governed by a set of parameters that is common for all stations

of the network" – See Col. 2, lines 12-16).

Regarding Claim 20, Wentink teaches the system of Claim 19, wherein said

circuitry capable of determining the quality of service to assign to the multimedia

application is also capable of determining a size of packets to be used for transmitting

data associated with the multimedia application from the system to the client ("Each

contention window value is 1 octet in length and contains an unsigned integer" – See

Col. 8, lines 47-48).

Regarding Claim 21, Wentink teaches the system of Claim 17, wherein said

circuitry capable of allocating the one or more resources to the multimedia application

based, at least in part, on the quality of service is also capable of assigning at least one

of:

a processing throughput (*"Each wireless station further includes a general-*

purpose processing unit (CPU) 20a-20e" – See Col. 4, lines 49-51; *"Application*

programs stored within the memory at each wireless station are executed by its CPU" –

See Col. 4, lines 51-53);

a queue length (*"Transmission opportunities are thus fairly allocated between all*

queues containing data messages of the same priority level" – See Abstract); and

memory buffer size (*"Using the information received via VxD 26c, data message*

units from a given session are mapped to one of these n traffic classifications and

placed in a corresponding one of queues 50_0 through 50_n within data buffers 34" – See

Col. 6, lines 11-14).

Regarding Claim 22, Wentink teaches the system of Claim 17, additionally said

circuitry additionally capable of:

queuing the application for servicing (*"A method according to an illustrative*

embodiment of the invention comprises directing, to a first output queue at a first station

contention window value is 1 octet in length and contains an unsigned integer" – See

Col. 8, lines 47-48).

Regarding Claim 21, Wentink teaches the system of Claim 17, wherein said

circuitry capable of allocating the one or more resources to the multimedia application

based, at least in part, on the quality of service is also capable of assigning at least one

of:

a processing throughput (*"Each wireless station further includes a general-*

purpose processing unit (CPU) 20a-20e" – See Col. 4, lines 49-51; *"Application*

programs stored within the memory at each wireless station are executed by its CPU" –

See Col. 4, lines 51-53);

a queue length (*"Transmission opportunities are thus fairly allocated between all*

queues containing data messages of the same priority level" – See Abstract); and

memory buffer size (*"Using the information received via VxD 26c, data message*

units from a given session are mapped to one of these n traffic classifications and

placed in a corresponding one of queues 50_0 through 50_n within data buffers 34" – See

Col. 6, lines 11-14).

Regarding Claim 22, Wentink teaches the system of Claim 17, additionally said

circuitry additionally capable of:

queuing the application for servicing (*"A method according to an illustrative*

embodiment of the invention comprises directing, to a first output queue at a first station

of a communication network, data message units that are to be transmitted over a communication medium and that have a first traffic classification" – See Col. 2, lines 24-28);

and scheduling the application for servicing (*"Once placed within one of the queues, the data message units are released in accordance with a coordination function (CF) implemented in a scheduler 52 which prioritizes the transmission of data message units from each queue in accordance with a defined access control algorithm"* – See Col. 6, lines 14-19).

Regarding Claim 23, Wentink teaches the system as in claim 17, wherein said circuitry is capable of operating in a bearer plane of a communications environment (*"a QoS scheme in which each of two time-sensitive streams of multimedia traffic--with each originating at a different station on the LAN--is assigned an identical level of transmission priority"* – See Col. 1, lines 40-43).

Regarding Claim 24, Wentink teaches a machine-readable medium having stored thereon instructions, the instructions when executed by a machine, result in the following:

in response, at least in part, to a request for a service from a system, determining a quality of service to assign to an application to be executed by the system to provide the service, the quality of service based, at least in part, on one or more service characteristics of the application (*"For example, in*

a network that supports multimedia services like video-on-demand, video

conferencing, online brokerage, and electronic commerce, a QoS

mechanism can prioritize time-sensitive multimedia data streams so that

their packets are transmitted--over a communication medium or channel

shared by two or more terminals or stations--with less delay and/or at a

higher rate than packets of data streams less affected or unaffected by

delay" – See Col. 1, lines 20-28); and

allocating one or more resources to the application, the one or more resources

based, at least in part, on the quality of service (*"Quality of service (QoS)*

mechanisms allocate transmission resources to different types or classes

of data traffic so that certain traffic classes can be preferentially served

over other classes" – See Col. 1, lines 16-20).

Regarding Claim 25, Wentink teaches the machine-readable medium of Claim

24, wherein the system comprises a modified intelligent media center (MIMC) (See Fig.

2 which shows a media station), and said instructions that result in determining a quality

of service to assign to the application result in determining a quality of service to assign

to a multimedia application to be executed by the MIMC to provide the service (*"For*

example, in a network that supports multimedia services like video-on-demand, video

conferencing, online brokerage, and electronic commerce, a QoS mechanism can

prioritize time-sensitive multimedia data streams so that their packets are transmitted--

over a communication medium or channel shared by two or more terminals or stations--

with less delay and/or at a higher rate than packets of data streams less affected or

unaffected by delay" – See Col. 1, lines 20-28).

Regarding Claim 26, Wentink teaches the machine-readable medium of Claim

25, wherein said instructions that result in determining the quality of service to assign to

the multimedia application result in assigning one or more QoS (quality of service)

parameters to the multimedia application (*"However, in accordance with an illustrative*

embodiment of the present invention, the release, for transmission, of data messages

having the same level of priority is governed by a set of parameters that is common for

all stations of the network" – See Col. 2, lines 12-16).

Regarding Claim 27, Wentink teaches the machine-readable medium of Claim

26, wherein the multimedia application is a wireless application (*"Initially, it should be*

noted that it may be desirable to increase the probability of successful transfer of

(MSDUs) across a shared channel such, for example, as the wireless medium

employed by the illustrative embodiment of the present invention" – See Col. 3, lines 51-

55), and the one or more QoS parameters comprise at least one of:

AIFS (arbitration inter-frame space) (arbitration inter-frame space) (*"the highest*

priority traffic class is directed to a queue that waits for a minimum interframe space

interval $QIFS_0$" – See Col. 7, lines 19-21);

CWmin (minimum contention window) (*"The scheduling function of the illustrative embodiment further specifies a contention window CWmin from which a random back off is computed for each queue"* – See Col. 6, lines 56-59);

CWmax (maximum contention window) (*"It should be noted that although a single value of CWmax common to all stations is suggested in FIG. 5, it is also possible to provide differentiated CWmax[i] values for the respective queues"* – See Col. 8, lines 10-13);

and PF (persistence factor) (*"the persistence factor, PF, is computed using the following procedure"* – See Col. 9, lines 6-7).

Regarding Claim 28, Wentink teaches the machine-readable medium of Claim 26, wherein said instructions, when executed by a machine, that result in determining the quality of service to assign to the multimedia application additionally result in determining a size of packets to be used for transmitting data associated with the multimedia application from the system to a client (*"Each contention window value is 1 octet in length and contains an unsigned integer"* – See Col. 8, lines 47-48).

Regarding Claim 29, Wentink teaches the machine-readable medium of Claim 24, wherein said instructions, when executed by a machine, result in allocating the one or more resources to the application based, at least in part, on the quality of service additionally result in assigning at least one of:

a processing throughput (*"Each wireless station further includes a general-purpose processing unit (CPU) 20a-20e"* – See Col. 4, lines 49-51; *"Application programs stored within the memory at each wireless station are executed by its CPU"* – See Col. 4, lines 51-53);

a queue length (*"Transmission opportunities are thus fairly allocated between all queues containing data messages of the same priority level"* – See Abstract); and

memory buffer size (*"Using the information received via VxD 26c, data message units from a given session are mapped to one of these n traffic classifications and placed in a corresponding one of queues 50_0 through 50_n within data buffers 34"* – See Col. 6, lines 11-14).

Regarding Claim 30, Wentink teaches the machine-readable medium of Claim 24, said instructions, when executed by a machine, additionally result in:

queuing the application for servicing (*"A method according to an illustrative embodiment of the invention comprises directing, to a first output queue at a first station of a communication network, data message units that are to be transmitted over a communication medium and that have a first traffic classification"* – See Col. 2, lines 24-28); and

scheduling the application for servicing (*"Once placed within one of the queues, the data message units are released in accordance with a coordination function (CF) implemented in a scheduler 52 which prioritizes the transmission of data message units*

from each queue in accordance with a defined access control algorithm" – See Col. 6,

lines 14-19).

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Wentink (US 7,136,392) in view of Yonge, III et al. (US 2004/0136396).

Regarding Claim 6, Wentink teaches the method of Claim 5, but fails to explicitly

teach the method wherein determining the size of packets comprises determining a size

of an MSDU (MAC – media access layer – service data unit) based, at least in part, on

at least one of the one or more service characteristics. However, Yonge does teach

determining a size of an MSDU (MAC – media access layer – service data unit) based,

at least in part, on at least one of the one or more service characteristics (See Table 1;

The column labeled "MSDU" shows various lengths of MSDUs corresponding to

different service characteristics). It would have been obvious to one of ordinary skill in

the art at the time the invention was made to combine Wentink's method of determining

a quality of service to assign to an application with Yonge's method of determining a

size of an MSDU. Motivation for doing so would be to provide an optimum data unit

size that is best-suited for a specific application.

Regarding Claim 7, Wentink in view of Yonge teaches the method of Claim 6.

Additionally, Yonge teaches the method wherein said determining the size of the data

packets additionally comprises determining the size of the MSDU based, at least in part,

on a priority associated with the class of service (*"MSDUs for applications at priority

class 7 are typically short (<500 octets)"* – See [0028], lines 32-33).

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Scott M. Sciacca whose telephone number is (571) 270-

1919. The examiner can normally be reached on Monday thru Friday, 7:30 A.M. - 5:00

P.M. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jeff Pwu can be reached on (571) 272-6798. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

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SS

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